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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/081,437

02/21/2002

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SONYJP 3.0-241

1006

530 7590 04/11/2011  
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EXAMINER

CHOWDHURY, SUMAIYA A

ART UNIT

PAPER NUMBER

2421

MAIL DATE

DELIVERY MODE

04/11/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Office Action Summary</b>	<b>Application No.</b> 10/081,437	<b>Applicant(s)</b> OISHI, KATSUMI	
	<b>Examiner</b> SUMAIYA A. CHOWDHURY	<b>Art Unit</b> 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |



## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

(a) Applicant argues that the prior art does not disclose the newly amended subject matter.

The Examiner has brought in Kubota (6970564) to disclose the newly amended subject matter.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (5659350) in view of Tsukakoshi (5086426), Okimoto (2002/0051539), Tamer (5619501), Roop (5619274), and Kubota (6970564).

As for claims 1, 5, and 6, Hendricks teaches a transmission device (cable headend 208), comprising:

a receiving unit (satellite receiver dish) operable to receive a digital signal distributed from a prescribed distribution device (operations center 202) – col. 6, lines 3-18, col. 8, lines 58-62;



a first generating unit operable to set identification information corresponding to a reception device (set top terminals 220) and reception control information for controlling the reception operation of the reception device in an area secured in advance in a format of composite information, thereby generating composite information; and a second generating unit operable to compose a predetermined number of digital signals on the basis of the composite information to generate redistribution digital signals containing the composite information (The cable head receives a multiplexed (composite) digital signal from the operations center. The cable headend prepares the control and programming signals for transmission to each set top terminal 220. The headend sends the control and programming signals to the set top terminals in the geographic area it is located. Based on the address set by the headend, the signal is routed to the corresponding set top terminal in its area. – col. 9, lines 18-28);

a transmitter (transmitter in headend) operable to transmit the redistribution digital signals to the reception device, and wherein the redistribution digital signals are formed on the basis of the received digital signal – col. 9, lines 18-28, col. 10, lines 45-46; and

wherein the packets of the redistribution signal have the same format of the received signal (Hendricks teaches that both the incoming and outgoing stream are MPEG streams, hence both streams have the same format. Col. 6, lines 44-54).

However, Hendricks fails to teach:

The received digital signal is made up of packets, the packets include a predefined area in which data can be written, and the formation of the redistribution



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signals includes writing information identifying the reception device in the predefined area and writing reception control information for the reception device in the predefined area, the writing of information identifying the reception device and the writing of reception control information for the reception device being performed on a frame-by-frame basis;

the redistribution signal is formed based on the packets of the received signal and frame transport packets which are not part of the received signal, the frame transport packets including an area in which data can be written;

the reception control information written in the frame transport packet corresponds to the transport packets associated with the frame transport packets; and

the composite information including (i) a version number of the composite information having a value that is incremented each time the composite information is renewed and (ii) a version number of the reception control information having a value that is incremented each time the reception control information is renewed;

In an analogous art, Tsukakoshi teaches

The received digital signal is made up of packets, the packets include a predefined area in which data can be written, and the formation of the redistribution signals includes writing information (destination address field 13) identifying the reception device in the predefined area (terminal 7C) and writing reception control information (control code field) for the reception device in the predefined area, the writing of information identifying the reception device and the writing of reception control



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information for the reception device being performed on a frame-by-frame basis (col. 6, lines 35-44; Fig. 7A).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks's invention to include the above mentioned limitation, as taught by Tsukakoshi, for the advantage of h providing an effective method in which only authorized devices will receive the stream.

However, Hendricks and Tsukakoshi fail to teach:

the redistribution signal is formed based on the packets of the received signal and frame transport packets which are not part of the received signal, the frame transport packets including an area in which data can be written;

the reception control information written in the frame transport packet corresponds to the transport packets associated with the frame transport packets; and

the composite information including (i) a version number of the composite information having a value that is incremented each time the composite information is renewed and (ii) a version number of the reception control information having a value that is incremented each time the reception control information is renewed;

In an analogous art, Okimoto discloses the redistribution signal is formed based on the packets of the received signal and frame transport packets which are not part of the received signal, the frame transport packets including an area in which data can be written (entitlement control message; [0043], [0062], [0072], [0073]; provisional application: 60/263,087: p. 2, line 12-p. 6, line 14-28, p. 7, lines 3-11, p. 9, line 19-p. 10, line 27, p. 11, lines 4-15, p. 11, line 32-p. 12, line 5);



It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks and Tsukakoshi's invention to include the above-mentioned limitation, as taught by Okimoto, for the advantage of ensuring that only authorized receivers receive the updated correct content.

However, Hendricks, Tsukakoshi, and Okimoto fail to disclose:

the composite information including (i) a version number of the composite information having a value that is incremented each time the composite information is renewed and (ii) a version number of the reception control information having a value that is incremented each time the reception control information is renewed;

In an analogous art, Tamer discloses the composite information includes a version number of the reception control information. In particular, Tamer discloses entitlement management messages EMM and the corresponding decryption keys are regularly transmitted. The EMM changes over time necessitating decryption keys to be regularly transmitted for the updated version (col. 4, lines 45-col. 5, line 3).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks, Tsukakoshi, and Okimoto's invention to include the abovementioned limitation, as taught by Tamer, for the advantage of allowing the subscriber equipment to determine program material to which the subscriber is entitled.

However, Hendricks, Tsukakoshi, Okimoto, and Tamer fail to disclose:

the composite information including a version number of the composite information having a value that is incremented each time the composite information is



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renewed and wherein the version number of the reception control information is incremented each time the reception control information is renewed.

In an analogous art, Roop discloses the composite information including (i) a version number of the composite information. In particular, Roop discloses a conditional access system which involves three levels of encryption. Program guides are encrypted with a DES key shared by all authorized units, which is called the program key. The program keys changed periodically are distributed (col. 12, lines 53-61).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks, Tsukakoshi, Okimoto, and Tamer's invention to include the abovementioned limitation, as taught by Roop, for the advantage of ensuring that only authorized equipment can decrypt the data.

However, Hendricks, Tsukakoshi, Okimoto, Tamer, and Roop fail to disclose wherein the version number of both the composite information and the reception control information is incremented each time the respective information is renewed.

In an analogous art, Kubota discloses wherein the version number of both the composite information and the reception control information is incremented each time the respective information is renewed (col. 21, lines 57-61, col. 22, lines 53-57).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks, Tsukakoshi, Okimoto, Tamer, and Roop's invention to include the abovementioned limitation, as taught by Kubota, such that the decoder at the receiver end references the latest version number currently valid.



As for claim 2, Hendricks teaches wherein the reception control information is set to control the reception operation for every digital signal for redistribution in the reception device (Each time the headend receives a digital broadcast signal, it distributes it to the plural set top terminals - col. 9, lines 18-28, col. 10, lines 45-46).

As for claims 3 and 9, Hendricks teaches wherein the first generating unit generates the composite information every time a digital signal for redistribution is received by the reception device or so that the composite information is achieved by the reception device when the composite information is renewed (Each time the headend receives a digital broadcast signal with the programming and control information, it generates multiple streams to be distributed to the plural set top terminals— col. 9, lines 18-28, col. 10, lines 45-46 ).

As for claims 4 and 10, Roop teaches wherein the renewal of the composite information is recognized on the basis of version information of the composite information (col. 12, lines 53-61).

Claim 7 includes the limitations of claim 1 and is analyzed as previously discussed with respect to claim 1. Claim 7 additionally calls for the following:



a processor (209 – fig. 3) for executing instructions; and instructions, the instructions including the steps to perform the method as recited in claim 1 (col. 9, lines 18-28).

As for claims 8, 12, and 13, Hendricks teaches a reception device, comprising:  
a storage unit (set top terminal) operable to store identification information corresponding to the reception device – col. 9, lines 18-28;

a receiver (set top terminal) operable to receive a redistribution digital signal containing composite information transmitted from a transmission device (headend) – col. 9, lines 18-28, col. 10, lines 45-46;

an achieving unit operable to achieve reception control information corresponding to the identification information stored in the storage unit from an area secured in advance in a format of the composite information – col. 6, lines 3-18, col. 8, lines 58-62, col. 9, lines 18-28;

an extracting unit operable to extract a desired digital signal from the redistribution digital signal by using the composite information– col. 6, lines 3-18, col. 8, lines 58-62, col. 9, lines 18-28; and

a processor operable to process the desired digital signal on the basis of the reception control information - col. 9, lines 18-28.

wherein the packets of the redistribution signal have the same format of the received signal (Hendricks teaches that both the incoming and outgoing stream are MPEG streams, hence both streams have the same format. Col. 6, lines 44-54).



However, Hendricks fails to teach:

The received digital signal is made up of packets, the packets include a predefined area in which data can be written, and the formation of the redistribution signals includes writing information identifying the reception device in the predefined area and writing reception control information for the reception device in the predefined area, the writing of information identifying the reception device and the writing of reception control information for the reception device being performed on a frame-by-frame basis.

the redistribution signal is formed based on the packets of the received signal and frame transport packets which are not part of the received signal, the frame transport packets including an area in which data can be written;

the reception control information written in the frame transport packet corresponds to the transport packets associated with the frame transport packets.

the composite information including (i) a version number of the composite information having a value that is incremented each time the composite information is renewed and (ii) a version number of the reception control information having a value that is incremented each time the reception control information is renewed;

In an analogous art, Tsukakoshi teaches

The received digital signal is made up of packets, the packets include a predefined area in which data can be written, and the formation of the redistribution signals includes writing information (destination address field 13) identifying the reception device in the predefined area (terminal 7C) and writing reception control



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information (control code field) for the reception device in the predefined area, the writing of information identifying the reception device and the writing of reception control information for the reception device being performed on a frame-by-frame basis (col. 6, lines 35-44; Fig. 7A).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks's invention to include the above mentioned limitation, as taught by Tsukakoshi, for the advantage of h providing an effective method in which only authorized devices will receive the stream.

However, Hendricks and Tsukakoshi fail to teach:

the redistribution signal is formed based on the packets of the received signal and frame transport packets which are not part of the received signal, the frame transport packets including an area in which data can be written;

the reception control information written in the frame transport packet corresponds to the transport packets associated with the frame transport packets; and

the composite information including (i) a version number of the composite information having a value that is incremented each time the composite information is renewed and (ii) a version number of the reception control information having a value that is incremented each time the reception control information is renewed;

In an analogous art, Okimoto discloses the redistribution signal is formed based on the packets of the received signal and frame transport packets which are not part of the received signal, the frame transport packets including an area in which data can be written (entitlement control message; [0043], [0062], [0072], [0073]);



It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks and Tsukakoshi's invention to include the above-mentioned limitation, as taught by Okimoto, for the advantage of ensuring that only authorized receivers receive the updated correct content.

However, Hendricks, Tsukakoshi, and Okimoto fail to disclose:

the composite information including (i) a version number of the composite information having a value that is incremented each time the composite information is renewed and (ii) a version number of the reception control information having a value that is incremented each time the reception control information is renewed;

In an analogous art, Tamer discloses the composite information includes a version number of the reception control information. In particular, Tamer discloses entitlement management messages EMM and the corresponding decryption keys are regularly transmitted. The EMM changes over time necessitating decryption keys to be regularly transmitted for the updated version (col. 4, lines 45-col. 5, line 3).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks, Tsukakoshi, and Okimoto's invention to include the abovementioned limitation, as taught by Tamer, for the advantage of allowing the subscriber equipment to determine program material to which the subscriber is entitled.

However, Hendricks, Tsukakoshi, Okimoto, and Tamer fail to disclose:

the composite information including a version number of the composite information having a value that is incremented each time the composite information is



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renewed and wherein the version number of the reception control information is incremented each time the reception control information is renewed.

In an analogous art, Roop discloses the composite information including (i) a version number of the composite information. In particular, Roop discloses a conditional access system which involves three levels of encryption. Program guides are encrypted with a DES key shared by all authorized units, which is called the program key. The program keys changed periodically are distributed (col. 12, lines 53-61).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks, Tsukakoshi, Okimoto, and Tamer's invention to include the abovementioned limitation, as taught by Roop, for the advantage of ensuring that only authorized equipment can decrypt the data.

However, Hendricks, Tsukakoshi, Okimoto, Tamer, and Roop fail to disclose wherein the version number of both the composite information and the reception control information is incremented each time the respective information is renewed.

In an analogous art, Kubota discloses wherein the version number of both the composite information and the reception control information is incremented each time the respective information is renewed (col. 21, lines 57-61, col. 22, lines 53-57).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Hendricks, Tsukakoshi, Okimoto, Tamer, and Roop's invention to include the abovementioned limitation, as taught by Kubota, such that the decoder at the receiver end references the latest version number currently valid.



As for claim 11, Hendricks teaches wherein the achieving unit achieves the reception control information separately from the reception of the redistribution digital signal in the receiver (Hendricks teaches first the control signals are received to generate menu templates – col. 11, lines 5-15. The user selects which program to view from the menu, causing the transmission of the programming to the user – col. 11, lines 33-40).

Claim 14 contains the limitations of claims 7 and 8 and is analyzed as previously discussed with respect to those claims.

As for claims 15 and 16, Tamer teaches wherein the renewal of the composite information is recognized on the basis of version information of the reception control information (col. 4, lines 45-col. 5, line 3).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within



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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUMAIYA A. CHOWDHURY whose telephone number is (571)272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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